RAND RESEARCH AREAS

CHILDREN AND FAMILIES
EDUCATION AND THE ARTS
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INFRASTRUCTURE AND
TRANSPORTATION
INTERNATIONAL AFFAIRS
LAW AND BUSINESS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
TERRORISM AND
HOMELAND SECURITY

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of published, peer-reviewed documents.

Headquarters Campus 1776 Main Street P.O. Box 2138 Santa Monica, California 90407-2138 TEL 310.393.0411 FAX 310.393.4818

© RAND 2010

www.rand.org

Do Bonuses Affect Enlistment and Reenlistment?

etween 2000 and 2008, the Department of Defense (DoD) budget for enlistment and reenlistment bonuses increased substantially, from \$266 million to \$625 million for enlistment bonuses and from \$891 million to \$1.4 billion for selective reenlistment bonuses (all figures are in 2008 dollars). These increases raised questions in Congress and at the Government Accountability Office about the scope and efficacy of bonuses. Congress directed DoD to provide information on the number and average amounts of bonuses and on metrics of bonus performance. DoD requested that the RAND National Defense Research Institute (NDRI) conduct analyses enabling a response to the congressional mandate.

Frequency and Size of Bonuses

In addressing the question of the size and scope of enlistment bonuses, NDRI focused on the Army and Navy. The percentage of Army recruits receiving bonuses went up from about 40 percent in 2004 to about 70 percent in 2008. Over the same period, the size of the average bonus among those receiving bonuses increased from \$5,600 to \$18,000 and from \$3,000 to \$12,000 among all recruits. Numerous occupational skills shared in the increase, although the amount of the increase varied by occupational specialty, suggesting that the Army used bonuses both to expand the market for recruits and to channel recruits into specific job skills.

In the Navy, the percentage of enlistees receiving bonuses declined while the percentage in the Army was increasing. The average size of bonuses, however, increased among those receiving them, but not to the same extent as in the Army. Navy bonuses were targeted to different skills in different years, however, suggesting that the objective was aimed more at skill-channeling than at market expansion.

With respect to reenlistment bonuses, the branches with the heaviest combat duties in

Key findings:

- Enlistment and reenlistment bonus programs are important in helping the services meet their recruiting and retention objectives.
- The services flexibly manage these programs by targeting bonuses to specific groups and adjusting them in a timely manner.
- Enlistment and reenlistment bonuses are cost-effective relative to pay as a recruiting and retention resource.

Operations Enduring Freedom and Iraqi Freedom had the largest increases in bonus use and generosity. For example, at some time during the past decade, the majority of soldiers reenlisting in the Army and Marine Corps received bonuses; in 2007, almost 80 percent of those soldiers reenlisting at the end of their first enlistment term received bonuses. Furthermore, the generosity of bonuses increased in these services as well. The average generosity of end-of-first-term reenlistment bonuses in the Army increased by more than 50 percent between 2003 and 2005–2007. In contrast, over this same period, the use of these bonuses declined in the Air Force, while their average generosity declined in the Navy.

Performance Metrics

To assess the performance of bonuses, the researchers needed criteria, which they drew from authoritative DoD sources. The criteria are that bonuses

- support DoD's force management goals, particularly recruiting and retention
- be used flexibly, i.e., be adjusted quickly to address specific evolving recruiting or retention problems
- be efficient in terms of achieving goals at the least cost relative to other resources.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of th , 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 2010	RT DATE 2. REPORT TYPE			3. DATES COVERED 00-00-2010 to 00-00-2010		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
Do Bonuses Affect Enlistment and Reenlistment?				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Rand Corporation, National Defense Research Institute, 1776 Main Street, PO Box 2138, Santa Monica, CA, 90407-2138				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	3		

Report Documentation Page

Form Approved OMB No. 0704-0188 Effectiveness. Using statistical models of Army enlistment data and civilian-sector economic and demographic data, the NDRI researchers found that enlistment bonuses were an important contributor to the Army's success in meeting its recruiting objectives in recent years. They estimated that high-quality Army enlistments would have been 26,700, or 20 percent lower between 2004 and 2008 in the absence of the increase in enlistment bonuses that occurred over this period. Their analysis suggests that the military operations in Iraq and Afghanistan had a downward effect on Army recruiting and that the expanded use and higher levels of bonuses helped counteract this downward trend.

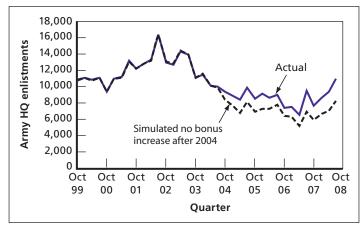
As for reenlistment bonuses, the researchers used their estimated models of reenlistment for each service to simulate the effect of eliminating the bonus program in 2007. They found that doing so would have reduced the probability of reenlistment in the Army at the end of the first term from 39 percent to 35 percent, a sizable drop. Alternative models produce even larger estimates for the Army, but in general, the estimates are consistent in suggesting that bonuses were a critical tool for the Army in meeting its retention objectives in 2007.

Compared with the Army, the estimated reenlistment effects of bonuses (other than deployment bonuses) at first term were the same for the Navy, higher for the Marine Corps, and lower for the Air Force. At second term, other services' estimates were lower than for the Army.

Bonuses were also found to positively influence the length of the term chosen by service members facing a reenlistment decision. For those at the end of their second term, the effect was smaller at high bonus levels, most likely because bonuses are subject to caps, meaning that above some reenlistment term length, signing up for a longer term earns no further bonus.

Flexibility. As mentioned, the Army used bonuses quite broadly. However, there was some variation in bonuses across occupational skills and terms of enlistment (or reenlistment). For example, in 2008, fire support specialists received enlistment bonuses over six times as great as those received by armament repairers. Also, the frequency with which the Army adjusted its bonuses over the years suggests proactive responsiveness to changing conditions.

Army High-Quality Recruiting Would Have Been Significantly Lower Without the Increase in Bonus Use and Generosity Between 2004 and 2008



Other services also demonstrated flexibility in bonus numbers and sizes. Percentages of reenlisting marines and airmen receiving bonuses varied between 20 percent and 80 percent over the period from 1996 to 2007, while average sizes of reenlistment bonuses varied by twofold or so. All told, the large variations in bonuses over time in each service indicate that this compensation tool, unlike basic pay and the various allowances paid by the services, can be turned on and off relatively easily and quickly.

Cost-Effectiveness. The NDRI researchers estimated that enlistment bonuses are more cost-effective than pay but less so than recruiters as a means to expand the market for the Army. The cost per additional high-quality recruit was estimated to be \$44,900 for bonuses, compared with \$57,600 for pay and \$33,200 for recruiters.

In the case of reenlistment bonuses, the researchers arrived at ranges of estimates based on varying assumptions. For bonuses (other than deployment bonuses), the cost in bonuses of an additional person-year of service at the first reenlistment point was \$24,900 for the Army, \$28,000 for the Navy, \$17,000 for the Marine Corps, and \$70,200 for the Air Force. The numbers at second term were higher for all but the Army, reflecting lower responsiveness to bonuses: \$23,900 for the Army, \$38,900 for the Navy, \$77,500 for the Marine Corps, and \$101,900 for the Air Force.



This research brief describes work done for the RAND National Defense Research Institute documented in Cash Incentives and Military Enlistment, Attrition, and Reenlistment, by Beth J. Asch, Paul Heaton, James Hosek, Francisco Martorell, Curtis Simon, and John T. Warner, MG-950-OSD (available at http://www.rand.org/pubs/monographs/MG950/), 2010, 195 pp., \$39, ISBN: 978-0-8330-4966-7. This research brief was written by James Chiesa. The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

RAND Offices

Santa Monica, CA • Washington, DC • Pittsburgh, PA • New Orleans, LA/Jackson, MS • Boston, MA • Doha, QA • Cambridge, UK • Brussels, BE



NATIONAL DEFENSE RESEARCH INSTITUTE

THE ARTS

CHILD POLICY

CIVIL JUSTICE

EDUCATION

ENERGY AND ENVIRONMENT

HEALTH AND HEALTH CARE

INTERNATIONAL AFFAIRS

NATIONAL SECURITY

POPULATION AND AGING

PUBLIC SAFETY

SCIENCE AND TECHNOLOGY

SUBSTANCE ABUSE

TERRORISM AND HOMELAND SECURITY

TRANSPORTATION AND INFRASTRUCTURE

WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

Support RAND

Browse Books & Publications

Make a charitable contribution

For More Information

Visit RAND at www.rand.org
Explore the RAND National Defense Research Institute
View document details

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.